# compounds from Table A

Ceperley 10/025,378

November 12, 2003

=> d que	<b>:</b>		•	
L4	1	SEA FILE=REGISTRY ABB=O	N PLU=ON	"UREA, N-(3-(DIMETHYLAMINO)PR
		OPYL)-N'-ETHYL-"/CN		
L9	115	SEA FILE=REGISTRY ABB=O	N PLU=ON	C5H14N2/MF
L10	115	SEA FILE=REGISTRY ABB=0	N PLU=ON	L9 AND NC=1
L11	108	SEA FILE=REGISTRY ABB=O	N PLU=ON	L10 NOT IDS/CI
L12	108	SEA FILE=REGISTRY ABB=0	N PLU=ON	L11 NOT PMS/CI
L13	1	SEA FILE=REGISTRY ABB=0	N PLU=ON	L12 AND "DIMETHYLAMINOPROPYLA
		MINE"		
L16	1	SEA FILE=REGISTRY ABB=0	N PLU=ON	"1,3-PROPANEDIAMINE,
		N, N-DIETHYL-"/CN		
L19	1	SEA FILE=REGISTRY ABB=O	N PLU=ON	1-PROPANAMINE, 3-CHLORO-N, N-D
		IMETHYL-/CN		
L20	1	SEA FILE=REGISTRY ABB=O	N PLU=ON	TRIETHYLAMINE/CN
L21	1	SEA FILE=REGISTRY ABB=0	N PLU=ON	TRIETHANOLAMINE/CN
L22	6	SEA FILE=REGISTRY ABB=O	N PLU=ON	L4 OR L13 OR L16 OR (L19 OR
		L20 OR L21)		•
L24	1318	SEA FILE=HCAPLUS ABB=ON	PLU=ON	"IMMUNOASSAY (L) AGGLUTINATION
		TEST"+OLD/CT		
L25	47253	SEA FILE=HCAPLUS ABB=ON	PLU=ON	IMMUNOASSAY+OLD,NT/CT
L27	10963	SEA FILE=HCAPLUS ABB=ON	PLU=ON	CARBODIIMIDES+NT/CT
L28	44	SEA FILE=HCAPLUS ABB=ON	PLU=ON	L22 AND L25
4I63:0	9	SEA FILE=HCAPLUS ABB=ON	PLU=ON	L28 AND (L24 OR L27 OR CDI OR
		CARBODIIMID? OR (PARTIC	L? OR LATI	EX)(3A)(AGGLUT? OR FIX?))

## => d ilbilo albs hitind hitstr 130 1-9

L30 ANSWER 1 OF 9 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 2003:488678 HCAPLUS

DOCUMENT NUMBER: 139:49497

TITLE: Tertiary amine compounds for use in immunoassays

INVENTOR(S): Lawrence, Christopher C.; Shanafelt, Armen B.

PATENT ASSIGNEE(S): Roche Diagnostics GmbH, Germany; F. Hoffmann-La Roche

AG

SOURCE: Eur. Pat. Appl., 13 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

. PATENT INFORMATION:

PATENT NO.	KIND DATE	APPLICATION NO.	DATE						
	·								
EP 1321770		EP 2002-27992							
R: AT, BE,	CH, DE, DK, ES,	FR, GB, GR, IT, LI, LU,	NL, SE, MC, PT,						
IE, SI,	LT, LV, FI, RO,	MK, CY, AL, TR, BG, CZ,							
US 2003138974	A1 20030724								
JP 2003207512	A2 20030725	JP 2002-363686	20021216						
PRIORITY APPLN. INFO	).:	US 2001-25378 A	20011218						
OTHER SOURCE(S):	MARPAT 139:	49497							
AB A reagent for use in immunoassays reduces interference in particle									
agglutination assays. The reagent contains particles having									

agglutination assays. The reagent contains particles having covalently bound antibodies and a tertiary amine compd. of formula (I): N(R1-X)(R2-Y)(R3-Z). The moieties R1, R2, and R3 are independently alkyl or alkyl ether. The moieties X, Y, and Z are independently -OH, -O-R4,

```
-S-R4, -C(=0)-OH, -C(=0)-OR4, or -C(=0)-NHR4 and R4 is alkyl.
    Triethanolamine gave improved performance in latex
    agglutination immunoassays.
    ICM G01N033-53
IC
    ICS G01N033-543
    9-10 (Biochemical Methods)
CC
    tertiary amine reducing interference particle
ST
    agglutination immunoassay; latex agglutination
    immunoassay triethanolamine reducing nonspecific binding
IT
    Immunoassay
        (agglutination test; tertiary amine compds. for
        reducing interference in particle agglutination
        immunoassays)
IT
    Antibodies
    RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses)
        (immobilized; tertiary amine compds. for reducing interference in
       particle agglutination immunoassays)
IT
    Immunoassay
        (latex agglutination test; tertiary amine
        compds. for reducing interference in particle
        agglutination immunoassays)
    Antibodies
IT
    RL: ARG (Analytical reagent use); RCT (Reactant); ANST (Analytical study);
    RACT (Reactant or reagent); USES (Uses)
        (monoclonal, latex particles sensitized with; tertiary amine compds.
        for reducing interference in particle agglutination
        immunoassays)
ΙT
    Carbodiimides
    RL: RCT (Reactant); RACT (Reactant or reagent)
        (particle surface activation with; tertiary amine compds. for reducing
        interference in particle agglutination
        immunoassays)
ΙT
    Latex
        (particles; tertiary amine compds. for reducing interference in
       particle agglutination immunoassays)
IT
    Amines, preparation
    RL: SPN (Synthetic preparation); PREP (Preparation)
        (reaction products, with succinimide esters, on particle surface;
        tertiary amine compds. for reducing interference in particle
        agglutination immunoassays)
IT
     Blood analysis
     Immobilization, molecular
       Immunoassay
    Microparticles
    Test kits
        (tertiary amine compds. for reducing interference in particle
        agglutination immunoassays)
    Amines, analysis
IT
    RL: ARU (Analytical role, unclassified); ANST (Analytical study)
        (tertiary; tertiary amine compds. for reducing interference in
        particle agglutination immunoassays)
IT
     Particles
        (with immobilized antibodies; tertiary amine compds. for reducing
        interference in particle agglutination
        immunoassays)
     459-73-4DP, Glycine ethyl ester, reaction products with succinimide ester
ΙT
     929-06-6DP, reaction products with succinimide ester 929-59-9DP,
```

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2,2'-(Ethylenedioxy)bisethylamine, reaction products with succinimide
             4246-51-9DP, 4,7,10-Trioxa-1,13-tridecanediamine, reaction
     products with succinimide ester
     RL: SPN (Synthetic preparation); PREP (Preparation)
        (on particle surface; tertiary amine compds. for reducing interference
        in particle agglutination immunoassays)
ΙT
     1403-66-3, Gentamicin
     RL: ANT (Analyte); ANST (Analytical study)
        (tertiary amine compds. for reducing interference in particle
        agglutination immunoassays)
ΙT
     102-71-6, Triethanolamine, analysis 104-78-9,
     3-Diethylaminopropylamine 109-54-6, Dimethylaminopropylchloride
     109-55-7, 3-Dimethylaminopropylamine 121-44-8,
     Triethylamine, analysis 32897-26-0, 1-Ethyl-3-(3-
     dimethylaminopropyl)urea
     RL: ARU (Analytical role, unclassified); ANST (Analytical study)
        (tertiary amine compds. for reducing interference in particle
        agglutination immunoassays)
                929-06-6 1892-57-5, 1-Ethyl-3-(3-dimethylaminopropyl)
IT
     633-96-5
                    6066-82-6, N-Hydroxysuccinimide
     carbodiimide
     RL: RCT (Reactant); RACT (Reactant or reagent)
        (tertiary amine compds. for reducing interference in particle
        agglutination immunoassays)
     123-56-8DP, Succinimide, esters, reaction products with primary amine on
ΙT
     particle surface
     RL: SPN (Synthetic preparation); PREP (Preparation)
        (tertiary amine compds. for reducing interference in particle
        agglutination immunoassays)
     102-71-6, Triethanolamine, analysis 104-78-9,
     3-Diethylaminopropylamine 109-54-6, Dimethylaminopropylchloride
     109-55-7, 3-Dimethylaminopropylamine 121-44-8,
     Triethylamine, analysis 32897-26-0, 1-Ethyl-3-(3-
     dimethylaminopropyl)urea
     RL: ARU (Analytical role, unclassified); ANST (Analytical study)
        (tertiary amine compds. for reducing interference in particle
        agglutination immunoassays)
RN
     102-71-6 HCAPLUS
     Ethanol, 2,2',2''-nitrilotris- (9CI) (CA INDEX NAME)
CN
             CH2- CH2- ОН
HO-CH2-CH2-N-CH2-CH2-OH
RN
     104-78-9 HCAPLUS
     1,3-Propanediamine, N,N-diethyl- (6CI, 7CI, 8CI, 9CI) (CA INDEX NAME)
CN
H_2N-(CH_2)_3-NEt_2
RN
     109-54-6 HCAPLUS
     1-Propanamine, 3-chloro-N, N-dimethyl- (9CI) (CA INDEX NAME)
CN
```

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Me
Me-N-(CH_2)_3-Cl
     109-55-7 HCAPLUS
     1,3-Propanediamine, N,N-dimethyl- (6CI, 8CI, 9CI) (CA INDEX NAME)
H_2N-(CH_2)_3-NMe_2
     121-44-8 HCAPLUS
RN
     Ethanamine, N, N-diethyl- (9CI) (CA INDEX NAME)
   Εt
Et-N-Et
     32897-26-0 HCAPLUS
RN
     Urea, N-[3-(dimethylamino)propyl]-N'-ethyl- (9CI) (CA INDEX NAME)
CN
      0
EtNH-C-NH-(CH<sub>2</sub>)<sub>3</sub>-NMe<sub>2</sub>
     1892-57-5, 1-Ethyl-3-(3-dimethylaminopropyl)carbodiimide
IT
     RL: RCT (Reactant); RACT (Reactant or reagent)
        (tertiary amine compds. for reducing interference in particle
        agglutination immunoassays)
     1892-57-5 HCAPLUS
RN
     1,3-Propanediamine, N'-(ethylcarbonimidoyl)-N,N-dimethyl- (9CI) (CA INDEX
CN
     NAME)
Et-N = C = N-(CH<sub>2</sub>)<sub>3</sub>-NMe<sub>2</sub>
L30 ANSWER 2 OF 9 HCAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER:
                          2003:355758 HCAPLUS
                           138:350816
DOCUMENT NUMBER:
                           Particles for immunoassays and methods for treating
TITLE:
INVENTOR(S):
                           Lawrence, Christopher C.; Yuan, Wei; Shanafelt, Armen
PATENT ASSIGNEE(S):
SOURCE:
                           U.S. Pat. Appl. Publ., 14 pp., Cont.-in-part of U.S.
                           Ser. No. 53,058.
                           CODEN: USXXCO
DOCUMENT TYPE:
                           Patent
                           English
LANGUAGE:
```

FAMILY ACC. NUM. COUNT:

#### PATENT INFORMATION:

```
APPLICATION NO. DATE
                            DATE
     PATENT NO.
                      KIND
                            _____
                      ____
                                           US 2001-25196
                            20030508
                                                             20011218
     US 2003087458
                      Α1
     US 2003092201
                      A1
                            20030515
                                           US 2001-53058
                                                             20011102
                                          EP 2002-24080
     EP 1319953
                      A1
                           20030618
                                                             20021029
         R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK
                            20030703
                                           JP 2002-318893 20021031
     JP 2003185667
                      A2
PRIORITY APPLN. INFO.:
                                        US 2001-53058 A2 20011102
                                        US 2001-25196
                                                         A 20011218
                         MARPAT 138:350816
OTHER SOURCE(S):
AB A method of treating particles to be used in immunoassays reduces
     interference in particle agglutination assays. For
     particles having covalently bound antibodies and residual NHS-ester or
     sNHS-ester groups on the surface, the reactive esters are treated with an
     aq. mixt. contg. an amine compd. of formula (I): 2 The moiety -X is -NH2,
     -OH, or -CO2CH2CH3; and R is an alkyl group or an alkyl ether group. When
     -X is -NH2 or -CO2CH2CH3, R contains from 1 to 20 carbon atoms; and when
     -X is -OH, R contains from 4 to 20 carbon atoms.
     ICM G01N033-543
IC
     ICS G01N033-545; B05D003-00
    436523000; 427002110
NCL
     9-10 (Biochemical Methods)
IT
     Immunoassay
        (agglutination test, Particle;
        particles for immunoassays and methods for treating the same)
IT
     Adsorption
     Alkyl groups
     Amino group
     Blood serum
     Ceramics
     Chemical formula
     Coupling agents
     Hydroxyl group
       Immunoassay
     Interference
     Latex
     Mixtures
     Particles
     Surface
        (particles for immunoassays and methods for treating the same)
IT
     Carbodiimides
     RL: RCT (Reactant); RACT (Reactant or reagent)
        (particles for immunoassays and methods for treating the same)
     79-09-4D, Propanoic acid, amines contg. 102-71-6,
TT
     Triethanolamine, reactions 123-56-8D, Succinimide, esters 459-73-4,
    Glycine ethyl ester 929-06-6 929-59-9, 2,2'-
     (Ethylenedioxy) bisethylamine 4246-51-9, 4,7,10-Trioxa-1,13-
     tridecanediamine 6066-82-6, N-Hydroxysuccinimide 7440-44-0D, Carbon,
     amines contg. 7782-44-7D, Oxygen, compd. contg.
                                                          82436-78-0,
     N-Hydroxysulfosuccinimide
     RL: RCT (Reactant); RACT (Reactant or reagent)
        (particles for immunoassays and methods for treating the same)
```

IT 102-71-6, Triethanolamine, reactions

RL: RCT (Reactant); RACT (Reactant or reagent)

(particles for immunoassays and methods for treating the same)

RN 102-71-6 HCAPLUS

CN Ethanol, 2,2',2''-nitrilotris- (9CI) (CA INDEX NAME)

сн<sub>2</sub>-- сн<sub>2</sub>-- он

HO-CH2-CH2-N-CH2-CH2-OH

L30 ANSWER 3 OF 9 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 2003:42536 HCAPLUS

DOCUMENT NUMBER: 138:103273

TITLE: Two-photon absorbing dipyrromethene boron difluoride

dyes and their applications Meltola, Niko; Soini, Aleksi

INVENTOR(S): Meltola, Niko; Soini, Aleksi
PATENT ASSIGNEE(S): Arctic Diagnostics Oy, Finland

SOURCE: PCT Int. Appl., 65 pp.

CODEN: PIXXD2

NE, SN, TD, TG

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE \_\_\_\_\_ \_\_\_\_\_ 20030116 **A**1 WO 2003005030 WO 2002-FI586 20020701 W: AE, AG, AL, AM, AT, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, CZ, DE, DE, DK, DK, DM, DZ, EC, EE, EE, ES, FI, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR,

PRIORITY APPLN. INFO.:

FI 2001-1439 A 20010702 US 2001-301788P P 20010702

OTHER SOURCE(S):

MARPAT 138:103273

GΙ

The invention relates to a sepn. free bioanal. assay method for measuring an analyte from a biol. fluid or suspension comprising of microparticles as a bioaffinity binding solid phase, a biospecific secondary reagent labeled with a two-photon fluorescent dipyrrometheneboron difluoride dye, focusing the laser into the reaction suspension measuring two-photon excited fluorescence from single microparticles when they randomly float or are guided by the radiation pressure of the excitation laser through the focal vol. of the laser beam using a two-photon fluorescent dipyrrometheneboron difluoride dye. Dye has the structure II. At least one of the groups R1, R2, R3, R4, R5, R6 or R7 is substituted to yield a chem. reactive group that can be used for selective covalent linkage to other mols. and at least one of the groups R1, R2, R3, R4, R5, R6, R7 is substituted to yield a water-solubilizing group.

IC ICM G01N033-543

ICS C09B062-44

CC 9-5 (Biochemical Methods)

Section cross-reference(s): 41

IT Body fluid

Drugs

Fluorometry

#### Immunoassay

Laser radiation

Microparticles

Two-photon absorption

(two-photon absorbing dipyrromethene boron difluoride dyes and their applications)

IT 68-12-2, DMF, reactions **121-44-8**, Triethylamine, reactions **538-75-0**, N, N'-Dicyclohexylcarbodiimide 2386-37-0 54474-50-9

72078-45-6

RL: RCT (Reactant); RACT (Reactant or reagent)

(two-photon absorbing dipyrromethene boron difluoride dyes and their applications)

IT 121-44-8, Triethylamine, reactions 538-75-0, N,

N'-Dicyclohexylcarbodiimide

RL: RCT (Reactant); RACT (Reactant or reagent)

(two-photon absorbing dipyrromethene boron difluoride dyes and their applications)

RN 121-44-8 HCAPLUS

CN Ethanamine, N, N-diethyl- (9CI) (CA INDEX NAME)

RN 538-75-0 HCAPLUS

CN Cyclohexanamine, N,N'-methanetetraylbis- (9CI) (CA INDEX NAME)

$$N = C = N$$

REFERENCE COUNT:

7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L30 ANSWER 4 OF 9 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER:

2002:365353 HCAPLUS

DOCUMENT NUMBER:

137:58925

TITLE:

New approach to immunochemical determinations for triclopyr and 3,5,6-trichloro-2-pyridinol by using a bifunctional hapten, and evaluation of polyclonal

antiserum

AUTHOR(S):

Watanabe, Eiki; Hoshino, Ryoko; Kanzaki, Yukiko; Tokumoto, Hiroshi; Kubo, Hiroaki; Nakazawa, Hiroyuki

CORPORATE SOURCE:

Department of Analytical Chemistry Faculty of Pharmaceutical Sciences, Hoshi University,

Shinagawa-ku Tokyo, 142-8501, Japan

SOURCE:

Journal of Agricultural and Food Chemistry (2002),

50(13), 3637-3646

CODEN: JAFCAU; ISSN: 0021-8561 American Chemical Society

PUBLISHER:
DOCUMENT TYPE:

Journal

LANGUAGE:

English

OTHER SOURCE(S):

CASREACT 137:58925

The present work describes the design and synthesis of the structurally unique hapten, "bifunctional hapten", to produce a group-specific polyclonal antiserum to triclopyr and 3,5,6-trichloro-2-pyridinol. A bifunctional hapten was designed and synthesized by conjugating com. available N.epsilon.-2,4-dinitrophenyl (DNP)-L-lysine to triclopyr, and then coupling this to carrier proteins such as bovine serum albumin (BSA). The synthesized bifunctional hapten greatly raised the antiserum titer in comparison with that of the conventional hapten, triclopyr. Antiserum with a sufficiently high titer to provide the detns. of targeted compds. was obtained only 63 days after the primary immunization. The obtained antiserum showed the highest affinity to triclopyr (IC50 = 3.5 nM) and 3,5,6-trichloro-2-pyridinol (IC50 = 5.1 nM) in homologous ELISA. The cross-reactivities to various agrochems. and some chlorinated phenolic compds. were detd. Significant cross-reactivity was found to the herbicide 2,4,5-T. The antiserum reacted to both triclopyr and its metabolite. Assay sensitivity was evaluated for effects of various assay conditions, including pH value and concns. of org. solvents and detergents. Under optimized assay conditions, the quant. working range of triclopyr ELISA was from 0.1 to 5.2 ng/mL with a limit of detection (LOD) of 0.037 ng/mL, and an IC50 of 0.72 ng/mL. On the other hand, the quant. working range of 3,5,6-trichloro-2-pyridinol ELISA was from 0.13 to 6.0 ng/mL with a LOD of 0.052 ng/mL, and an IC50 of 0.95 ng/mL. Water samples fortified with triclopyr or its metabolite at 1, 5, and 10 ng/mL were directly analyzed without extn. and cleanup by the proposed ELISA. The mean recovery was 101.6%, and the mean coeff. of variation (CV) was 7.1% in the case of the triclopyr ELISA. In the case of the 3,5,6-trichloro-2-pyridinol ELISA, the mean recovery was 99.8%, and the mean CV was 9.5%. The proposed ELISA turned out to be a powerful tool for monitoring of residual triclopyr or 3,5,6-trichloro-2-pyridinol in water samples at trace level.

CC 5-1 (Agrochemical Bioregulators)
 Section cross-reference(s): 61

IT Immunoassay

(enzyme-linked immunosorbent assay; for triclopyr and 3,5,6-trichloro-2-pyridinol using polyclonal antiserum prepd. with bifunctional hapten)

IT 67-56-1, Methanol, reactions 121-44-8, Triethylamine, reactions

538-75-0, N,N'-Dicyclohexylcarbodimide 1094-76-4,

(DNP)-L-lysine 2592-95-2, 1-Hydroxy-1H-benzotriazole 14455-27-7,

L-Lysine, N6-(2,4-dinitrophenyl)-, hydrochloride RL: RCT (Reactant); RACT (Reactant or reagent)

(prepn. of bifunctional hapten for immunochem. detns. of triclopyr and 3,5,6-trichloro-2-pyridinol)

IT 121-44-8, Triethylamine, reactions 538-75-0,

N, N'-Dicyclohexylcarbodiimide

RL: RCT (Reactant); RACT (Reactant or reagent)

(prepn. of bifunctional hapten for immunochem. detns. of triclopyr and 3,5,6-trichloro-2-pyridinol)

RN 121-44-8 HCAPLUS

CN Ethanamine, N, N-diethyl- (9CI) (CA INDEX NAME)

RN 538-75-0 HCAPLUS

CN Cyclohexanamine, N,N'-methanetetraylbis- (9CI) (CA INDEX NAME)

$$N = C = N$$

REFERENCE COUNT:

THERE ARE 44 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L30 ANSWER 5 OF 9 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER:

1998:197670 HCAPLUS

DOCUMENT NUMBER:

128:254896

CODEN: PIXXD2

TITLE:

Multi-array, multi-specific electrochemiluminescent

testing

INVENTOR(S):

Wohlstadter, Jacob N.; Wilbur, James; Sigal, George; Martin, Mark; Guo, Liang-Hong; Fischer, Alan; Leland, Jon; Billadeau, Mark A.; Helms, Larry R.; Darvari,

Ramin

PATENT ASSIGNEE(S):

Meso Scale Technologies, LLC, USA

SOURCE:

PCT Int. Appl., 288 pp.

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PAS	rent	NO.		KI	ND	DATE			A	PPLI	CATI	ON NO	o	DATE			
									_								
WO	9812	539		A.	1	1998	0326		W	0 19	97–บ	S169	42	1997	0917		
	W:	AL,	AM,	ΑT,	AU,	ΑZ,	BA,	BB,	BG,	BR,	BY,	CA,	CH,	CN,	CU,	CZ,	DE,
		DK,	EE,	ES,	FI,	GB,	GE,	GH,	HU,	ID,	IL,	IS,	JP,	ΚE,	KG,	KP,	KR,
		ΚZ,	LC,	LK,	LR,	LS,	LT,	LU,	LV,	MD,	MG,	MK,	MN,	MW,	MX,	NO,	ΝZ,
		PL,	PT,	RO,	RU,	SD,	SE,	SG,	SI,	SK,	SL,	ТJ,	TM,	TR,	TT,	UA,	UG,
		UZ,	VN,	YU,	ZW,	AM,	ΑZ,	BY,	KG,	ΚZ,	MD,	RU,	TJ,	ΤM			

```
RW: GH, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR,
             GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA,
             GN, ML, MR, NE, SN, TD, TG
                                           US 1996-715163
                            20010327
                                                            19960917
     US 6207369
                       В1
                                           AU 1997-46495
                                                            19970917
     AU 9746495
                       Α1
                            19980414
     AU 743567
                       В2
                            20020131
     EP 944820
                       Α1
                            19990929
                                           EP 1997-945249
                                                            19970917
         R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, FI
    JP 2001503856
                                           JP 1998-514984
                                                            19970917
                       T2
                            20010321
                                                         A 19960917
                                        US 1996-715163
PRIORITY APPLN. INFO.:
                                        US 1995-402076
                                                         B2 19950310
                                        US 1995-402277
                                                         B2 19950310
                                        US 1996-611804
                                                         A2 19960306
                                        WO 1997-US16942 W 19970917
    Materials and methods are provided for producing patterned multi-array,
    multi-sp. surfaces for use in diagnostics. The invention provides for
    electrochemiluminescence methods for detecting or measuring an analyte of
     interest. It also provides for novel electrodes for ECL assays.
     Materials and methods are provided for the chem. and/or phys. control of
     conducting domains and reagent deposition for use multiply specific
     testing procedures.
    ICM G01N021-00
IC
         G01N033-53; G01N033-533; G01N033-543; C12M001-00; C12Q001-00
     ICS
     9-1 (Biochemical Methods)
CC
     Section cross-reference(s): 73
ΙT
     Immunoassay
        (chemiluminescence, electro-; multiple electrochemiluminescent sandwich
        immunoassay on polyacrylamide surface supported on electrode)
IT
     121-44-8, processes
                         814-68-6, Acryloyl chloride
                                                        130727-41-2,
     (1-Mercapto-11-undecyl)tri(ethylene glycol)
     RL: PEP (Physical, engineering or chemical process); PROC (Process)
        (fabrication of multiple electrochemiluminescent sandwich immunoassay
        on polyacrylamide surface supported on electrode)
    108-30-5, reactions 1892-57-5, Ethyl-3-diaminopropylcarbodiimide
IT
     6066-82-6, N-Hydroxysuccinimide 13822-56-5, 3-
    Aminopropyltrimethoxysilane
     RL: RCT (Reactant); RACT (Reactant or reagent)
        (prepn. of aerosil 200 silica particles coated with streptavidin in
        electrochemiluminescent assays)
     121-44-8, processes
IT
     RL: PEP (Physical, engineering or chemical process); PROC (Process)
        (fabrication of multiple electrochemiluminescent sandwich immunoassay
        on polyacrylamide surface supported on electrode)
     121-44-8 HCAPLUS
CN
     Ethanamine, N, N-diethyl- (9CI) (CA INDEX NAME)
   Εt
Et-N-Et
```

IT 1892-57-5, Ethyl-3-diaminopropylcarbodiimide
RL: RCT (Reactant); RACT (Reactant or reagent)
(prepn. of aerosil 200 silica particles coated with streptavidin in electrochemiluminescent assays)

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1892-57-5 HCAPLUS
RN
```

1,3-Propanediamine, N'-(ethylcarbonimidoyl)-N,N-dimethyl- (9CI) (CA INDEX CN

Et-N = C = N-(CH<sub>2</sub>)<sub>3</sub>-NMe<sub>2</sub>

REFERENCE COUNT:

THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L30 ANSWER 6 OF 9 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER:

1997:761899 HCAPLUS

DOCUMENT NUMBER:

128:45575

TITLE:

Preparation of fluorescent group-containing

carbodiimide compounds for nucleic acid

detection

INVENTOR(S):

Suzuki, Osamu; Masuda, Gen; Shiohata, Namiko;

Matsumoto, Kazuko

PATENT ASSIGNEE(S):

Nisshinbo Industries, Inc., Japan; Nisshin Spinning

SOURCE:

Eur. Pat. Appl., 50 pp.

CODEN: EPXXDW

DOCUMENT TYPE:

Patent English

LANGUAGE:

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO. DATE	
EP 808829	A1	19971126	EP 1997-303430 1997	0520
EP 808829	В1	20030409		
R: DE, FR,	GB			
JP 10287870	A2	19981027	JP 1997-122638 1997	0513
US 5856479	Α	19990105	US 1997-857536 1997	0516
PRIORITY APPLN. INFO.	. :		JP 1996-124793 A 1996	0520
			JP 1996-296887 A 1996	1108
			JP 1997-32459 A 1997	0217

OTHER SOURCE(S):

MARPAT 128:45575

Fluorescent group-contg. carbodiimides are prepd. for use in the detection of nucleic acids by immuno- or chemiluminescence assays. 1-aminopyrene and 3-(dimethylamino)propyl isothiocdyanate to give a thiourea followed by conversion to the title carbodimide. The above compd. was used for the detection of hybrid nucleic acid.

ICM C07C267-00

ICS C07H021-00; C12Q001-68; G01N033-53

9-5 (Biochemical Methods)

Section cross-reference(s): 3, 41

nucleic acid detection fluorescent carbodiimide prepn; DNA hybridization fluorescent carbodiimide prepn

Nucleic acid hybridization TΤ

RL: ANT (Analyte); ANST (Analytical study)

(DNA-DNA; prepn. of fluorescent group-contg. carbodiimide compds. for nucleic acid detection)

Fluorescent indicators

Fluorometry

ΙT

Immunoassay
Luminescence, chemiluminescence

```
(prepn. of fluorescent group-contg. carbodiimide compds. for
       nucleic acid detection)
ΙT
    DNA
    Immobilization, biochemical
    Nucleic acid hybridization
    RL: ANT (Analyte); ANST (Analytical study)
        (prepn. of fluorescent group-contg. carbodiimide compds. for
       nucleic acid detection)
IT
    Antibodies
    RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses)
        (prepn. of fluorescent group-contg. carbodiimide compds. for
       nucleic acid detection)
    Antigens
IT
    RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses)
        (prepn. of fluorescent group-contg. carbodiimide compds. for
       nucleic acid detection)
                   199933-40-9P
                                   199933-42-1P
                                                  199933-43-2P
                                                                 199933-44-3P
    199933-38-5P
ΙT
                                  199933-47-6P
                                                  199933-48-7P
                                                                 199933-49-8P
                   199933-46-5P
    199933-45-4P
    199933-50-1P
    RL: ARG (Analytical reagent use); SPN (Synthetic preparation); ANST
     (Analytical study); PREP (Preparation); USES (Uses)
        (prepn. of fluorescent group-contg. carbodiimide compds. for
       nucleic acid detection)
     60-32-2, 6-Aminocaproic acid
                                   66-71-7, 1,10-Phenanthroline
                                                                   80-48-8
ΙT
              120-75-2, 2-Methylbenzothiazole 123-00-2,
    109-55-7
     4-Morpholinepropanamine 326-91-0
                                        491-35-0, 4-Methylquinoline
     605-65-2 611-35-8, 4-Chloroquinoline 627-31-6, 1,3-Diiodopropane
     1606-67-3, 1-Pyrenamine 1892-57-5 2382-96-9,
     2-Benzoxazolethiol 4048-33-3, 6-Amino-1-hexanol
                                                         27421-70-1
                              146616-66-2
                                            163921-37-7
     35231-44-8 82911-69-1
    RL: RCT (Reactant); RACT (Reactant or reagent)
        (prepn. of fluorescent group-contg. carbodiimide compds. for
       nucleic acid detection)
                             13673-62-6P 18884-15-6P
                                                           54258-41-2P,
ΙT
    2654-52-6P
                 4199-88-6P
     1,10-Phenanthrolin-5-amine 58992-59-9P 67013-48-3P 88574-06-5P
                                                                 169454-25-5P
     110232-19-4P
                   126139-93-3P
                                  145387-51-5P
                                                  161057-97-2P
                                                  199933-52-3P
     174417-52-8P
                    174417-53-9P
                                   199933-51-2P
                                                                 199933-53-4P
     199933-54-5P
                    199933-57-8P
                                   199933-58-9P
                                                  199933-59-0P
                                                                 199933-60-3P
                                   199933-63-6P
                                                  199933-64-7P
                                                                 199933-65-8P
     199933-61-4P
                   199933-62-5P
                                  199933-70-5P
    199933-66-9P
                   199933-67-0P
    RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
     (Reactant or reagent)
        (prepn. of fluorescent group-contg. carbodiimide compds. for
       nucleic acid detection)
ΙT
     109-55-7 1892-57-5
     RL: RCT (Reactant); RACT (Reactant or reagent)
        (prepn. of fluorescent group-contg. carbodiimide compds. for
       nucleic acid detection)
RN
     109-55-7 HCAPLUS
CN
     1,3-Propanediamine, N,N-dimethyl- (6CI, 8CI, 9CI) (CA INDEX NAME)
H_2N - (CH_2)_3 - NMe_2
    1892-57-5 HCAPLUS
RN
    1,3-Propanediamine, N'-(ethylcarbonimidoyl)-N,N-dimethyl- (9CI) (CA INDEX
CN
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NAME)

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Et-N = C = N-(CH<sub>2</sub>)<sub>3</sub>-NMe<sub>2</sub>
```

L30 ANSWER 7 OF 9 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1997:42008 HCAPLUS

DOCUMENT NUMBER: 126:57123

TITLE: Method for analyzing biological active substances INVENTOR(S): Suzuki, Osamu; Sasaki, Naokazu; Ichihara, Tatsuo;

Okada, Sanae

PATENT ASSIGNEE(S): Nisshinbo Industries, Inc., Japan

SOURCE: Eur. Pat. Appl., 22 pp.

CODEN: EPXXDW

DOCUMENT TYPE:

Patent English

LANGUAGE: Eng FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NC	. KIND	DATE	APPLICATION NO.	DATE
	<b></b> -			
EP 747703	A2	19961211	EP 1996-304158	19960605
EP 747703	A3	19980909		
EP 747703	B1	20021023		
R: D	E, FR, GB			
JP 083345	09 A2	19961217	JP 1995-143715	19950609
US 590874	6 A	19990601	US 1996-660295	19960607
PRIORITY APPLA	I. TNFO.:		JP 1995-143715 A	19950609

- AB A method is provided, comprising the steps of reacting a biol. active first substance immobilized on a carrier with a second substance capable of specifically binding the first substance, and detecting a non-bound part of the second substance or a bound part of the second substance indirectly bound to the carrier through binding between the first and second substances so that the first substance or the second substance in a sample is analyzed, wherein the carrier carries a compd. having 2-100 carbodiimide groups, and the first substance is immobilized on the carrier through the carbodiimide groups so that the active substance such as protein and nucleic acid is bound to the carrier conveniently, efficiently, and tightly.
- IC ICM G01N033-543
  - ICS G01N033-547; G01N033-58; C12Q001-68
- CC 9-16 (Biochemical Methods)

Section cross-reference(s): 3, 15

- ST bioactive compd detection immobilization carbodiimide compd; biopolymer detection carbodiimide compd
- IT Immunoglobulins
  - RL: ANT (Analyte); ANST (Analytical study)
    - (G; biol. active substances detection by carrier immobilization and using carbodimide compds.)
- IT Immunoassay

(agglutination test; biol. active substances detection by carrier immobilization and using carbodiimide compds.)

IT Biochemical molecules
Immobilization, biochemical

```
Microtiter plates
    Nucleic acid hybridization
        (biol. active substances detection by carrier immobilization and using
        carbodiimide compds.)
    Antibodies
ΙT
    Antigens
    Biopolymers
     DNA
    Nucleic acids
    Peptides, analysis
     Proteins, general, analysis
    RL: ANT (Analyte); ANST (Analytical study)
        (biol. active substances detection by carrier immobilization and using
        carbodiimide compds.)
ΙT
    Avidins
     RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses)
        (biol. active substances detection by carrier immobilization and using
        carbodiimide compds.)
    Chemiluminescent substances
IT
    RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses)
        (biol. active substances detection by carrier immobilization and using
        carbodiimide compds.)
ΙT
     Dyes
    RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses)
        (biol. active substances detection by carrier immobilization and using
        carbodiimide compds.)
    Enzymes, uses
ΙT
    RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses)
        (biol. active substances detection by carrier immobilization and using
        carbodiimide compds.)
    Fluorescent probes
IT
    RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses)
        (biol. active substances detection by carrier immobilization and using
        carbodiimide compds.)
     Radionuclides, uses
IT
     RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses)
        (biol. active substances detection by carrier immobilization and using
        carbodiimide compds.)
IT
     RL: ARU (Analytical role, unclassified); ANST (Analytical study)
        (biol. active substances detection by carrier immobilization and using
        carbodiimide compds.)
IΤ
     Immunoassay
        (enzyme-linked immunosorbent assay, sandwich; biol. active substances
        detection by carrier immobilization and using carbodiimide
        compds.)
    Polyoxyalkylenes, reactions
ΙT
     RL: RCT (Reactant); RACT (Reactant or reagent).
        (reaction products with 4,4-diphenylmethane diisocyanate; biol. active
```

IT Interferons

carbodiimide compds.)

- RL: ANT (Analyte); ANST (Analytical study)
  (.gamma.; biol. active substances detection by carrier immobilization and using carbodiimide compds.)
- IT 9003-53-6, Polystyrene
  RL: ARU (Analytical role, unclassified); ANST (Analytical study)

substances detection by carrier immobilization and using

```
(beads; biol. active substances detection by carrier immobilization and
        using carbodiimide compds.)
                             9002-60-2, ACTH, analysis
ΙT
     9001-91-6, Plasminogen
    RL: ANT (Analyte); ANST (Analytical study)
        (biol. active substances detection by carrier immobilization and using
        carbodiimide compds.)
     58-85-5, Biotin 151-51-9, Carbodiimide
                                              1672-46-4,
ΙT
                  9013-20-1, Streptavidin
                                             185159-87-9
                                                           185159-88-0
     Digoxigenin
    185159-89-1
                   185159-90-4
                                 185159-91-5
                                               185159-92-6
    RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses)
        (biol. active substances detection by carrier immobilization and using
       carbodiimide compds.)
    9017-01-0DP, TDI homopolymer, reaction products with Ph isocyanate
ΙT
    25686-28-6DP, 4,4'-Diphenylmethane diisocyanate polymer, reaction products
                                                     53880-05-0DP, Isophorone
     with Ph isocyanate or with polyethylene glycol
    diisocyanate homopolymer, reaction products with Bu isocyanate
     62948-28-1DP, 4,4'-Dicyclohexylmethane diisocyanate homopolymer, reaction
    products with cyclohexyl isocyanate
    RL: ARG (Analytical reagent use); SPN (Synthetic preparation); ANST
     (Analytical study); PREP (Preparation); USES (Uses)
        (biol. active substances detection by carrier immobilization and using
        carbodiimide compds.)
     80-48-8D, Methyl p-toluenesulfonate, reaction products with isocyanate
ΙT
     terminated-isophorone diisocyanate homopolymer and 3-
    dimethylaminopropylamine 103-71-9D, Phenyl isocyanate, reaction products
     with TDI homopolymer 109-55-7D, 3-Dimethylaminopropylamine,
     reaction products with isocyanate terminated-isophorone diisocyanate
                 110-60-1D, 1,4-Diaminobutane, reaction products with
     homopolymer
     4,4-dicyclohexylmethane diisocyanate 111-36-4D, n-Butyl isocyanate,
     reaction products with poly(isophorone diisocyanate)
                                                            3173-53-3D,
     Cyclohexyl isocyanate, reaction products with poly(4,4'-
    dicyclohexylmethane diisocyanate
                                       9004-74-4D, reaction products with
     isocyanate-terminated poly(m-Tetramethylxylylene diisocyanate)or
    poly(4,4'-dicyclohexylmethane diisocyanate) 25322-68-3D, reaction
                                                     111460-07-2D, Sodium
     products with 4,4-diphenylmethane diisocyanate
     hydroxypropanesulfonate, reaction products with isocyanate-terminated
     tolylene carbodiimide
     RL: RCT (Reactant); RACT (Reactant or reagent)
        (biol. active substances detection by carrier immobilization and using
        carbodiimide compds.)
     53880-05-0DP, Isophorone diisocyanate homopolymer, isocyanate terminated
     157299-02-0DP, m-Tetramethylxylylene diisocyanate homopolymer, isocyanate
     RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
     (Reactant or reagent)
        (biol. active substances detection by carrier immobilization and using
        carbodiimide compds.)
     9004-34-6, Cellulose, analysis
ΙT
     RL: ARU (Analytical role, unclassified); ANST (Analytical study)
        (filter membrane; biol. active substances detection by carrier
        immobilization and using carbodiimide compds.)
ΙT
     151-51-9, Carbodiimide
```

- RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses) (biol. active substances detection by carrier immobilization and using carbodiimide compds.)
- RN 151-51-9 HCAPLUS
- CN Methanediimine (9CI) (CA INDEX NAME)

### HN == C == NH

RN 109-55-7 HCAPLUS

CN 1,3-Propanediamine, N,N-dimethyl- (6CI, 8CI, 9CI) (CA INDEX NAME)

 $H_2N-(CH_2)_3-NMe_2$ 

L30 ANSWER 8 OF 9 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER:

1987:530527 HCAPLUS

DOCUMENT NUMBER:

107:130527

TITLE:

Fluorescent compounds and biological diagnostic

devices

INVENTOR(S):

Arnost, Michael J.; Inbar, Shai; Meneghini, Frank A.; Palumbo, Paul S.; Stroud, Stephen G.; Zepp, Charles M.

PATENT ASSIGNEE(S):

Polaroid Corp., USA

SOURCE:

PCT Int. Appl., 59 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATEN'	r no.		KIND	DATE	APPLICATION NO.	DATE
WO 86	06374		A1	19861106	WO 1986-US912	19860423
W	: AU,	JΡ				
R	W: AT,	BE,	CH, DE,	, FR, GB,	IT, LU, NL, SE	
US 48	86744		Α	19891212	US 1986-850123	19860410
AU 86	58105	•	A1	19861118	AU 1986-58105	19860423
AU 59	1673		B2	19891214		
EP 22	0284		A1	19870506	EP 1986-903061	19860423
EP 22	0284		B1	19900131		
R	. AT,	BE,	CH, DE,	, FR, GB,	IT, LI, LU, NL, SE	
JP 62	502548	•	Т2	19871001	JP 1986-502508	19860423
AT 50	065		Ε .	19900215	AT 1986-903061	19860423
PRIORITY A	PPLN.	INFO.	. :	•	US 1985-727126	19850425
					US 1986-850123	19860410
				•	EP 1986-903061	19860423
					WO 1986-US912	19860423

GI For diagram(s), see printed CA Issue.

AB A fluorescent conjugate, having a large Stokes shift and useful in biol. diagnostic assays, comprises a biol. active moiety attached to a dye moiety I [R = alkyl, hydrophilic group-contg. substituent; R1 = H; R and R1 = C6 carbocyclic; R2, R3 = CN, COR7, COOR8, electron-withdrawing substituent substituted Ph; R2 and R3 = II; X = nonmetallic atoms in a 5-or 6-member carbocyclic or heterocyclic moiety; R4, R5 = alkyl,

hydrophilic group-contg. substituent; R5 and R6 = (CH2)2; R6 = H; R7 = alkyl, aryl; R8 = alkyl, aryl, hydrophilic group-contg. substituent; R9, R10 = H, alkyl, hydrophilic group-contg. substituent] by a substantially achromophoric divalent linking moiety (LINK) e.g. N-hydroxysuccinimide esters, aldehydes. A labeled biol. conjugate comprises III or IV (R10 = alkyl; A = LINK; Z = biol. active moiety). V, prepd. from N-phenylpyrrolidone, 4-dicyanomethylene-2,5-dimethyl-4-H-pyran (a highly fluorescent merocyanine dye), and N-hydroxysuccinimide in 6 steps, was reacted with rabbit serum Fab anti-human serum albumin in a 0.1 M HEPES buffer at pH 8.0 and room temp. for 20 min; the reaction was then stopped by addn. of glycine. The conjugate compn. (spectroscopically detd.) was 3:1 V/Fab.

IC ICM C07D309-34

ICS C07D311-58; G01N001-30; G01N033-533

CC 9-14 (Biochemical Methods)

Section cross-reference(s): 27, 41, 73, 80

IT Immunochemical analysis

(fluorescence immunoassay, biol. conjugates with

fluorescent dyes for)

100-61-8, N-Methylaniline, reactions 108-24-7, ΙT 85-44-9 Acetic anhydride 108-31-6, Maleic anhydride, reactions 121-44-8 , reactions 538-75-0, Dicyclohexylcarbodiimide 603-76-9, 1-Methylindole 999-97-3, 1,1,1,3,3,3-Hexamethyldisilazane 2,6-Dimethyl-.gamma.-pyrone 1606-75-3 4341-85-9, Malonitrile 4641-57-0 5292-43-3 5438-71-1, Theophylline-8-butyric acid 6066-82-6, N-Hydroxysuccinimide 7087-68-5, Diisopropylethylamine 28286-88-6 57951-36-7, Dimethylaminopyridine 110259-58-0 23730-69-0 110325-10-5 110325-11-6 RL: RCT (Reactant); RACT (Reactant or reagent)

(reaction of, in prepn. of fluorescent conjugates for biochem. assays) 121-44-8, reactions 538-75-0, Dicyclohexylcarbodiimide

RL: RCT (Reactant); RACT (Reactant or reagent)

(reaction of, in prepn. of fluorescent conjugates for biochem. assays)

RN 121-44-8 HCAPLUS

CN Ethanamine, N, N-diethyl- (9CI) (CA INDEX NAME)

IT

RN 538-75-0 HCAPLUS

CN Cyclohexanamine, N, N'-methanetetraylbis- (9CI) (CA INDEX NAME)

$$N = C = N$$

L30 ANSWER 9 OF 9 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER:

1984:451309 HCAPLUS

DOCUMENT NUMBER:

101:51309

TITLE:

Unsymmetrical fluorescein derivatives

INVENTOR(S):

Khanna, Pyare; Colvin, Warren

PATENT ASSIGNEE(S):

Syva Co., USA

SOURCE:

U.S., 14 pp. CODEN: USXXAM

DOCUMENT TYPE:

Patent

Ethanamine, N, N-diethyl- (9CI) (CA INDEX NAME)

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

	PATENT NO.	KIND DATE		APPLICATION NO.	DATE						
	US 4439356	A 198403	27	US 1981-240031	19810303						
	US 4652531	A 198703	24	US 1984-587085	19840307						
PRIC	RITY APPLN. INFO.	:	US	1981-240031	19810303						
AB	Unsym. fluoresce	in derivs. we	re prepd	., particularly 1	,8-unsubstituted-9-						
					h. substituent at						
	any of the remaining positions, where the aliph. substituent is sepd. from										
	the annular C atom by 0-1 O atom. These fluorescent compds. have										
					at least .apprx.500						
	nm, and they can	be used to r	educe ba	ckground fluoresc	ence interference						
	occurred in chem	. anal. They	are pot	entially useful f	or detection or						
					gs, metabolites and						
				assays, e.g., im	munoassay.						
IC	A61K039-385; A61	K039-44; C07G	007-00								
NCL											
CC	9-10 (Biochemica										
	Section cross-re		, 2, 7,	15							
ΙT	Immunochemical a										
	Pharmaceutical a			<b>.</b>							
		escein derivs	. prepn.	for)							
ΙT	121-44-8, reacti										
	RL: RCT (Reactan										
		with butylgl	ycinate)								
ΙT	91000-90-7 910										
	RL: RCT (Reactan			reagent) A <b>rbodiimide</b> and hy							
	succinimide)	with dicyclo	пехут са	rbodilmide and ny	droxy						
ΙT	6066-82-6										
11	RL: RCT (Reactan	+1. DACT /DAR	ctant or	reagentl							
				orodicarboxyhydro	xvanthenone and						
		carbodiimide)	peneaem	oroarcarbonynyaro	nyamememone and						
IT	538-75-0	Carbourinide)									
11	RL: RCT (Reactan	t): RACT (Rea	ctant or	reagent)							
	(reaction of	with methoxy	pentachl	orodicarboxyhydro	xvxanthenone and						
	hydroxysuccin		P 00								
IT	121-44-8, reacti										
	RL: RCT (Reactan		ctant or	reagent)	•						
		with butylgl			•						
RN	121-44-8 HCAPLU		<u> </u>								
		11 11 1 1000	\ (CT T	MEDIC MANCEL	•						

Et | Et-N-Et

CN

IT 538-75-0

RL: RCT (Reactant); RACT (Reactant or reagent) (reaction of, with methoxypentachlorodicarboxyhydroxyxanthenone and hydroxysuccinimide)

RN 538-75-0 HCAPLUS

CN Cyclohexanamine, N,N'-methanetetraylbis- (9CI) (CA INDEX NAME)

$$N = C = N$$